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Shoring Up the Homeland Defense: The Joint Medical Task Force and
Weapons of Mass Destruction


by

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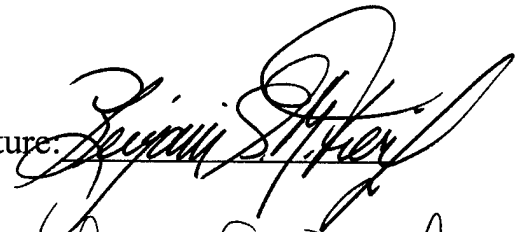
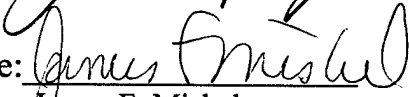
A paper submitted to the Faculty of the Naval War College in partial
satisfaction of the requirements of the Department of Joint Military
Operations.

The contents of this paper reflect my own personal views and are not
necessarily endorsed by the Naval War College or the Department of the
Navy.

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Abstract of

Shoring Up the Homeland Defense: The Joint Medical Task Force and Weapons of Mass Destruction

America is no longer safe within her borders. At any time, a determined group of foreign or domestic terrorists will target American citizens and institutions with Weapons of Mass Destruction (WMD) composed primarily of lethal biological or chemical agents. Presently, many of our nation's military and civilian hospitals are not prepared to respond to WMD threats, as the United States Public Health Service (USPHS) is the only line of medical defense against these threats.

A layered defensive strategy must be considered as a back-up capability to address gaps in the "WMD medical defense shield." This capability should be created from our armed forces' reserve medical personnel to form *Joint Medical Task Forces (JMTF)* to augment USPHS capabilities and to assist local community hospitals in the event of a WMD incident.

The Incident

3 July 1999: By week's end, approximately 1,700 people in the city were dead. According to a spokesman at Saint Alicia's Memorial Medical Center, the city's only hospital, an unidentified "flu virus" may be responsible. The victims' initial symptoms included weakness, headache, nonproductive cough, and dull chest pain. In all cases, death was a result of respiratory failure. All of the initial victims were young children, elderly, or individuals who had previous health problems. Physicians at the medical center and county health officials were scrambling to identify the exact cause and had ordered viral cultures be taken from patients. They also performed autopsies on the initial five victims. On Wednesday, the Mayor and the State Commissioner of Public Health recommended the Governor declare a statewide emergency. The Governor agreed and mobilized the state National Guard to establish a quarantine around the city.

On 4 July 1999, shortly after midnight, radio station WMMX received a phone call from a known extremist group called the "Sons of Freedom" who claimed responsibility for the act. The group's spokesman described how they planted four "biological warfare devices" containing anthrax at the Federal Center prior to the evening rush hour on Friday, 26 June.

At Saint Alicia's, the situation became critical. The casualty reception and triage area expanded into the parking lot and temporary wards were set up on the south lawn using large Army tents. Medical supplies were nearly exhausted, and shortages of staff personnel made it impossible to render medical care. A frustrated emergency room physician remarked: "We were never ready for this..."

Shoring Up the Homeland Defense: The Joint Medical Task Force and Weapons of Mass Destruction

“Well-trained physicians might not recognize the signs of infection by a military weapon in a patient, especially if it is a mixed combination. Physicians should be warned that the effects of a weaponized organism on the human body may be very different from natural disease caused by the same organism.”¹

Richard Preston
The Cobra Event

The previously described “incident” is fictitious, but in reality many of our nation’s civilian and military hospitals are not prepared to medically respond to weapons of mass destruction (WMD) incidents, especially if biological or chemical agents are employed by terrorists. An example of this situation was evident during the Chicago Biological Tabletop Exercise sponsored by the Department of Defense (DOD) and the U. S. Army Chemical and Biological Defense Command on 28 July 1998.² Representatives from 13 of the 63 area hospitals attended this exercise and expressed concerns over their respective hospitals’ inability to maintain operations 48 hours into the exercise scenario.³

Local and state governments do not possess sufficient resources to address these shortcomings. In recognition of this, President Bill Clinton issued Presidential Decision Directive (PDD 62) in May 1998, tasking Federal government departments and agencies with specific duties to respond to the WMD threat.⁴ The United States Public Health Service (USPHS) was designated as the lead agent to plan a coordinated nationwide medical response to terrorist-induced incidents of WMD. Part of their mandate was to create 25 Metropolitan Medical Response Systems (MMRS) in 25 different U. S. cities during fiscal year 1997.⁵ An additional 20 MMRS will be operational by the end of fiscal

year 1999.⁶ Paramedics, emergency medical technicians (EMT) and health care providers will voluntarily man these “systems.” When deployed, their mission will be to initially treat up to 1,000 biological or chemical attack victims and to provide medical support to local communities.⁷ Additionally, they are to develop partnerships with local health systems to proactively enhance their emergency medical response capabilities. Creating the MMRS is a positive first step towards providing support to the local community hospital system, however, these systems are not enough to cope with the potentially massive harmful effects of a biological or chemical attack. Appendix A provides detailed information on the MMRS.

A potential resource to consider in coping with expected shortfalls in responding to WMD incidents is the medical personnel of U. S. military reserve components. Not only can they augment the MMRS efforts, but they can also supplement the staff of local community hospitals and support response efforts by the Federal Emergency Management Agency (FEMA).

In order to make reserve augmentation a viable option, I propose the creation of ten Joint Medical Task Forces (JMTF) composed entirely of reserve component medical personnel. A JMTF would be assigned to each of FEMA’s ten nationwide regions. In the analysis below, I will examine the opportunities and challenges to creating such JMTFs, to include: doctrine development, joint training, and use of technological innovation. In addition, I will analyze the potential of the JMTF as it relates to the medical element of the newly created National Guard Rapid Assessment Initial Detection (RAID) Elements.

The Future is Now

There is no doubt another WMD attack against a major U. S. population center will occur in the future. The precedent was set on 26 February 1993 when four radical Muslims detonated a combination explosive and cyanide bomb in the parking garage of the New York World Trade Center, resulting in six people being killed and thousands more injured.⁸ The death toll could have been much higher had it not been for the powerful force of the explosion, which vaporized the cyanide.⁹ This incident, followed by the subway sarin gas attacks in Tokyo, Japan three years later, served as the “wake up call” for our national leaders, compelling them to develop and build a national WMD defensive strategy.

Are Our Hospitals Prepared?

A significant factor in our nation’s defenses against WMD is our military and civilian hospital system. However, given the rarity of WMD attacks, the hospital’s medical staffs are not familiar with WMD agents, nor are they equipped to handle large numbers of WMD victims. Specifically, hospitals will be impacted in a biological or chemical WMD environment in the following areas:¹⁰

- First Responders: Initially, Emergency Medical Technicians and Paramedics will be able to respond; however, during prolonged operations, they will risk exposure to WMD agents and may become incapacitated.
- Capacity: Hospital Emergency Rooms and Trauma Centers will become quickly overwhelmed due to the sheer number of patients seeking treatment.
- Logistics: Hospitals and medical centers will experience shortages of vital medical supplies and medical equipment such as ventilators and respirators.
- Medical Staff: Health care providers such as physicians, nurses, and technicians will be absent or incapacitated due to exposure to WMD agents.

In general, why are America's hospitals and their medical staffs not prepared? There are three reasons: First, lack of hospital national accreditation standards addressing preparedness for WMD; second, hospitals today focus exclusively on managing patient care costs versus devoting some time and resources to WMD disaster planning; and third, a serious lack of continuing medical education addressing WMD agents. Appendix B provides additional information on each of these issues.

The nation's medical system finds itself in a dilemma when it comes to responding to WMD. On one hand, hospitals must conduct business to be efficiently competitive. On the other hand, investments in WMD response capability could increase cost and reduce efficiency as assets, equipment, and pharmaceutical supplies may rarely, if ever, be used. How can this dilemma be solved? The answer lies in part with FEMA and the USPHS.

The Federal Government Response Effort

Earlier, I mentioned that PDD 62 laid out the Clinton Administration's policy for the Federal government to plan a coordinated response to domestic WMD incident. This on-going policy of "crisis" and "consequence management" is coordinated through the National Coordinator for Security, Infrastructure Protection and Counter-Terrorism at the National Security Council.¹¹ For Federal assets to be deployed in a WMD or non-WMD incident, the responding agencies must follow the Federal Response Plan (FRP).¹²

When responding to a WMD incident, the concepts of "crisis management" and "consequence management" will work concurrently. The Federal Bureau of Investigation (FBI) is the lead agency for WMD crisis management and will investigate the criminal aspects of WMD incidents.¹³ FEMA, on the other hand, is responsible for

consequence management, mitigating the effects of the WMD incident and coordinate disaster relief to affected communities.¹⁴

Consequence Management: In 1993, the United States Congress enacted the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), directing federal departments, agencies, and voluntary organizations to provide resources for disaster support to requesting local communities and states.¹⁵ To implement this Act, the Federal Response Plan (FRP) was created to group these resources into 12 Emergency Support Functions (ESF). The plan further assigns a federal department or agency the responsibility as “primary agency” for each function. FEMA has been assigned the overall coordinator of the FPR.¹⁶ Appendix C summarizes the ESF’s and assigned primary agencies.

The USPHS has been tasked as the Primary Agency for ESF 8: Health and Medical Services.¹⁷ In the event of a major disaster, USPHS and FEMA will implement the National Disaster Medical System (NDMS), which is a “cooperative asset-sharing” voluntary program involving military organizations, the Veterans Administration, and private hospitals.¹⁸ In wartime, NDMS is designed to provide a system of “pre-committed non-Federal” hospital beds and medical care for military casualties evacuated back to the continental United States from an overseas armed conflict.¹⁹ In peacetime, NDMS can assist local and state governments in dealing with a major peacetime disaster by providing inpatient medical services to evacuated victims. DOD supports NDMS through the U. S. Air Force’s aeromedical evacuation system.²⁰

In addition, NDMS supports 27 rapidly deployable teams throughout the country called Disaster Medical Assistance Teams (DMAT), which are principally community assets available to local jurisdictions.²¹ Each DMAT consists of approximately 100

volunteer medical professionals providing primary health care or augmenting overloaded hospitals. When activated and deployed, the volunteers become federal employees.²²

Strengths and Weaknesses: The medical capabilities of the USPHS -- NDMS, DMAT, and the newly created MMRS-- constitute a credible response asset for all levels of government to draw upon. However, as with all capabilities, they have *critical strengths* and *critical vulnerabilities*:

NDMS: A critical strength here is the capability to provide acute care beds to evacuated biological and chemical victims. Many of these voluntarily participating NDMS hospitals are located in major metropolitan areas and have state-of-the-art medical facilities supported by a well-trained staff.

In contrast, the locations of NDMS hospitals makes them vulnerable. Mostly located in major population areas, terrorists could target these hospitals and areas with WMD, rendering the NDMS capabilities unreachable. A worse case scenario is for terrorists to strike these capabilities in metropolitan areas after casualties have been evacuated there.

An additional vulnerability is the distance to NDMS hospitals. Depending on the situation, if available facilities are in neighboring states or cities, then biological and chemical casualties would have to be evacuated out of the disaster site by aeromedical means. This could increase the danger of spreading the contamination to other jurisdictions.

DMAT: The critical strength of the DMAT is their local volunteer community staff. This is a significant advantage since personal and professional affiliations enable the team to locally "network" among colleagues and sponsor joint WMD medical exercises, which can be a part of community disaster response training.

However, a critical vulnerability for the DMAT is its capabilities. Presently, the DMAT can only respond to conventional disasters. They also lack additional training and specialized WMD equipment needed to provide medical care in a biological and chemical environment.

Finally, sustainment will be an issue for the DMAT. When deployed, it will have enough equipment and supplies to support 72 hours of operations.²³ In a high casualty intensive WMD environment, availability of medical "lines of communication" will be a significant operational limiting factor.

MMRS: This is USPHS's newest capability, totally dedicated to providing medical support for WMD casualties. Like the DMAT, it is also locally manned by volunteers and will lend medical expertise in decontamination procedures, pharmacology, and surveillance to the local community's WMD health planning staff.

The critical vulnerability of the MMRS is its unique character. Along with the DMAT, there is no other capability in the USPHS's inventory. Therefore, if a local MMRS is unable to deploy is disabled or rendered ineffective, other USPHS assets would have to be identified and mobilized to respond. This will increase the response time in providing medical care to an affected area.

Although the USPHS is mandated to plan the national medical response to WMD, a layered defensive strategy must be employed to maximize the medical services delivered to biological and chemical casualties. This strategy should include a closer partnership between USPHS and DOD to create additional teams to backup or augment the DMAT and MMRS. My proposed *Joint Medical Task Force (JMTF)* can provide this much-needed augmentation.

The Joint Medical Task Force: A "Force Multiplier"

"We will work to upgrade our public health systems for detection and warning, to aid our preparedness against terrorist, and to help us cope with infectious diseases that arise in nature. We will train and equip local authorities throughout the nation to deal with an emergency involving weapons of mass destruction..."²⁴

-President Bill Clinton
Naval Academy Commencement Address
22 May 1998

Developing the JMTF requires unlimited imagination and "out-of-the-box" thinking. It also requires the ability to accept a new approach towards employing reserve component personnel. In my view, the JMTF can be most effective when the following considerations are implemented:

It Needs to Be "Joint": Each service has unique skills other services do not have in their inventory. Such skills, when used jointly, would make the JMTF most effective. For example, the Army has veterinarians, the Navy has environmental health officers, and the Air Force has aeromedical specialists. The services' enlisted ranks also have a diversified field of expertise to include Preventive Medicine Technicians, Independent Duty Hospital Corpsmen/Medics, and Biomedical Repair Technicians. Employing such "jointness" allows the medical training, experience, "lessons learned," equipment and facilities to be shared among the services. In conjunction with its peacetime role, the JMTF can concurrently develop expertise for a wartime role as medical experts in force protection and the treatment of WMD casualties in the battlefield.

Develop Robust Capabilities: Medical reserve personnel assigned to the JMTF can be trained and equipped to provide medical care to victims in a biological or chemical contaminated environment. Their equipment and procedures should be uniquely developed to mirror the MMRS to provide mutual support, as well as fulfill their wartime role in force protection. When deployed, the JMTF should have ten days of supplies for

operations and the ability to be logistically supported within 24 hours after being mobilized.

Streamlined Composition and Functions: JMTF's needs to mirror each other to facilitate uniform training and equipping and for mutual support. Each unit will consist of 8 to 10 officers and 23 to 25 enlisted personnel. Figure 1 illustrates a proposed JMTF organization. Figure 2 outlines the functions of each JMTF.

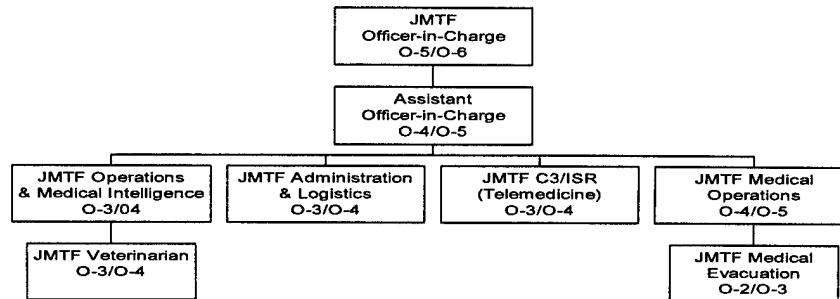


Figure 1

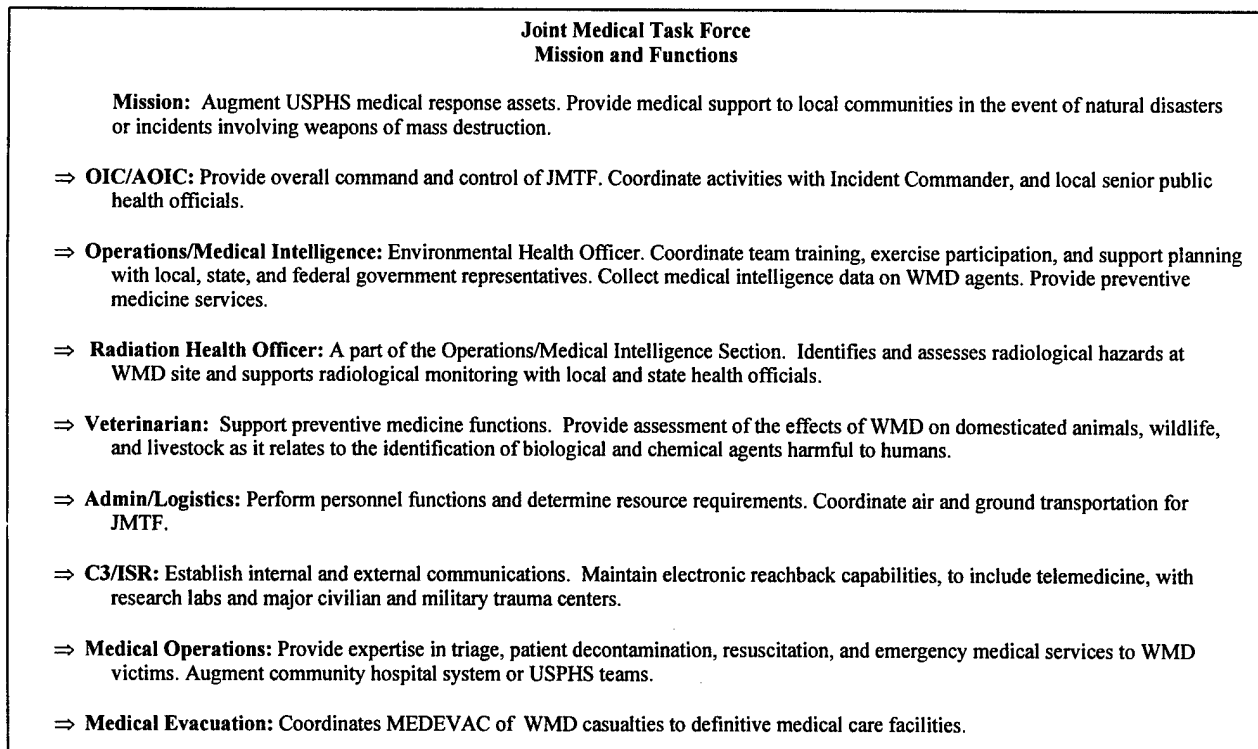


Figure 3

Effectively Locate to Maximize Cooperation: To quickly respond to WMD incidents, I propose a JMTF be assigned to each of FEMA's ten regions as illustrated in figure 3.

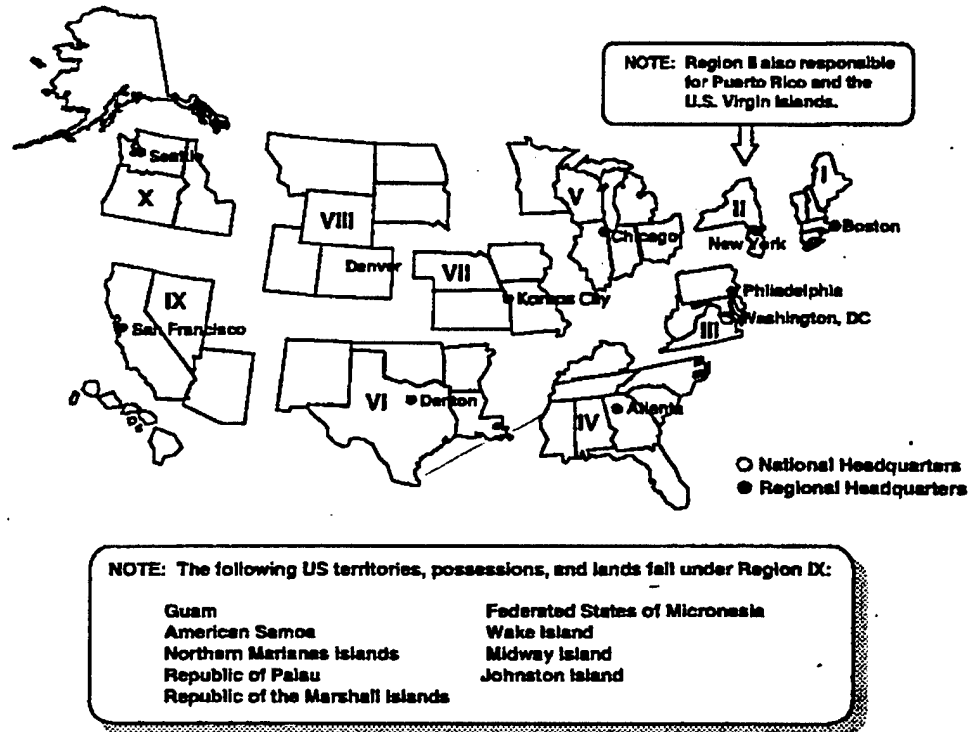


Figure 3²⁵

Such assignment would most effectively employ the JMTF's for two reasons:

- In the first place, FEMA regional offices will serve as the entry point for JMTF's. In a disaster involving WMD, the regional FEMA representative will serve as the Federal Coordinating Officer (FCO) and represent the President at a Federally Declared Disaster Site.²⁶ The DOD counterpart to the FEMA regional representative is the Defense Coordinating Officer (DCO).²⁷ The DCO will coordinate requests for DOD assets through the Director of Military Support (DOMS) who represents the Secretary of the Army as DOD's executive agent for military support to civil authorities (MSCA).²⁸ In cooperation with FEMA and the USPHS, this will facilitate point for the JMTF's

entry into the nation's medical response services. Appendix D outlines the procedures for local and state governments to request federal assistance through FEMA.

- Secondly, the JMTF's association with of FEMA's ten regions will facilitate its coordination with the newly formed DOD assessment unit, the National Guard Rapid Assessment Incident Detection (RAID) Elements.²⁹ Becoming operational on 1 October 1998, the ten RAID Elements were assigned to each of the ten FEMA regions with the mission of "providing early assessment, initial detection, and technical advice" to the incident commander.³⁰ Each RAID Element is manned by 22 full time active duty National Guardsmen, including a medical cell. The Element falls under the authority of their respective state Governors. When deployed, the RAID Element's medical cell's only mission will only be to assess the medical requirements for a local community and recommend response measures.³¹ The cell will provide organic medical support to RAID Element personnel, but it does not have the capability to treat WMD casualties. Appendix E provides additional information on the. National Guard RAID Elements.

In a response scenario, the OIC of the JMTF could accompany the RAID Element to a WMD disaster site to assist in the assessment while the remainder of the JMTF is back in "home base" preparing for deployment.

Maximize Command and Control: The proposed JMTF could respond to a dual chain of command. For military-specific issues, JMTF would be under the administrative and operational control of the FIRST Army or FIFTH Army, depending on which FEMA region the JMTF is assigned. In the event of a major catastrophic WMD incident, Commanders, FIRST Army and FIFTH Army are designated as "Response Task Force" (RTF) commanders, and are further designated as RTF-East (FIRST Army) and RTF-West (FIFTH Army), respectively.³² The dividing line is the Mississippi River. The

RTF's mission is to serve as a headquarters element and liaison to FEMA, and when deployed, coordinate additional DOD assistance to a WMD incident. Both RTFs reports to United States Army Forces Command (COMFORSCOM) who, in turn, reports to Commander-in-Chief USA Command (CINCUSACOM).³³ CINCUSACOM has designated COMFORSCOM as the "Lead Operational Authority" for the Military Support to Civil Authorities (MSCA).³⁴

Exploiting Emerging Technology: The JMTF must take advantage of emerging technology designed to assist WMD biological or chemical casualties. An example of such technology is telemedicine, which would enable JMTF physicians to communicate with major medial trauma centers, research laboratories, and organizations such as the Centers for Disaster Control (CDC), and consult with WMD subject matter experts to rapidly treat WMD patients. In addition, the JMTF could serve as the test bed for future experimental medical equipment and devices specifically designed in the WMD environment. This can be achieved by DOD forming a research and development partnership with agencies such as the Food and Drug Administration and private companies in the information technology industry.

Enhance Peacetime Outreach: JMTF's greatest contribution will not happen on the "WMD battlefield," but during peaceful times when opportunities exist to build relationships for mutual support with community first responders, hospital officials, emergency managers, and local government officials. This can be achieved through joint training, joint exercises, and joint medical planning. Such team-building efforts would be invaluable, enabling all parties to respond as one interacting organization should a WMD event occur. As best stated by an emergency room physician participating in the Chicago

Biological Tabletop Exercise: "An emergency is the *worst time* to meet your response partners for the *first time*."

Develop Doctrine: The JMTF will require newly developed doctrine focusing on supporting multi-level government and interagency civilian support, and enhancing the traditional military relationships to facilitate responsiveness. Issues that need to be addressed include:

-Developing a FEMA regional focus: In a multi-state role, the JMTF will support a number of local, state, and federal governmental departments, as well as voluntary and private organizations as part of their outreach function. This area will be crucial at the local level, since many jurisdictions rely on volunteers to operate their emergency management systems (EMS).

-Establish Local Operational Intelligence Database: To be successful, the JMTF must have a means of collecting and compiling information concerning the FEMA region they support. Such information will enable the JMTF to adequately respond when a WMD incident occurs. At a minimum, local operational intelligence data should include:

- Regional points of contacts.
- Capabilities of local hospitals and major medical centers.
- Capabilities of responding organizations.
- Information on interservice support agreements state mutual aid compacts, and memorandums of understanding.

-Operations under the Incident Command System (ICS): Generally, ad hoc response organizations are formed when a disaster occurs. Through exercises and training can responding organizations be familiar with key players and their roles. One means of enhancing this process is through the Incident Command System (ICS).³⁵ Used

extensively by civilian disaster response organizations, as well as by local fire departments or director of emergency management services, the ICS is used to coordinate response assets during an emergency.³⁶ The fire chief is usually designated as the Incident Commander with a pre-designated staff, grouped in functional areas, including medical, to manage their respective areas.³⁷

As a military officer, the Officer-in-Charge of the JMTF may assume he will be in charge of all medical services, when in fact, under ICS a local public health official will be assigned this function. He must understand the JMTF is in a support role and be aware of this relationship during the WMD incident.

Challenges to the JMTF

The JMTF concept represents a capability the medical community can embrace in bolstering defenses for WMD. However, there are some challenges and limitations that must be addressed if this idea can transition from concept to reality. Among those are:

The Reserve Bureaucracy: Implementation of the JMTF concept will require a top-down approach due to the potential for competing demands among the services and their respective reserve organizations. The bottom line is, forming ten joint units to support FEMA regions will require the cooperation of all the services while competing for resource dollars and resolving programming issues. Services will be less inclined to support the JMTF concept if billets, personnel, and resources will be taken from "in hide."

This raises an additional question as to who will be the overall resource sponsor for the JMTF? Should it be at the DOD level, specifically the Assistant Secretary of Defense for Reserve Affairs, or a service component such as the U. S. Army?

Lack of external support: To be fully functional, the JMTF will require significant external support to house and maintain equipment, supplies, and performing administrative functions. In addition, when mobilized, the JMTF will require external logistical support such as ground and air transportation and a logistical "tail" for re-supply.

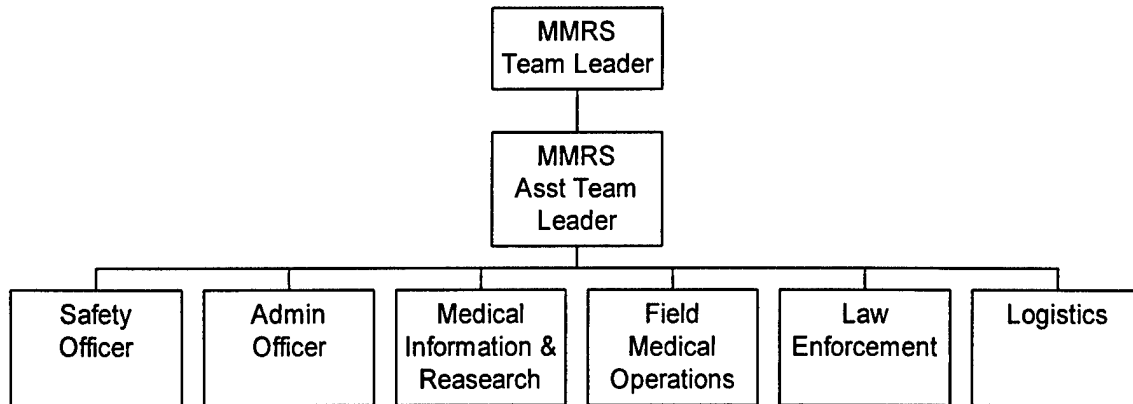
Training: JMTF personnel will require additional reserve drill time to train to requirements. Currently, reserve personnel are authorized 48 drill periods encompassing 12 drill weekends over the course of a fiscal year.³⁸ They are also authorized two weeks of active duty for training. Additional active duty training days would have to be increased in order to pay for drill periods involving joint training and joint exercises with local civilian agencies.

Conclusion

The proposed *Joint Medical Task Force* will provide our nation with an additional level of insurance against the WMD threat. Along with response partners such as the USPHS and local and state governments, this secondary capability in peacetime will provide national response leaders with the flexibility to cover a variety of WMD contingencies. In wartime, the JMTF will add a higher level of medical care in force protection and the treatment of WMD casualties in the battlefield.

Appendix A

Metropolitan Medical Response System (MMRS)^{39/40}



Mission: The United States Public Health Service/Office of Emergency Preparedness developed the Metropolitan Medical Response System (MMRS) as a locally available, nuclear, biological or chemical (NBC) trained incident response team and component of Emergency Support Function (ESF) #8 of the Federal Response Plan (FRP). Within this framework, MMRS will mobilize for large-scale NBC terrorist events on a local, state, and national basis.

Command and Control: Team Leader and Assistant Team Leader. Responsible for managing all team activities during a mission assignment.

Safety Officer: Responsible for monitoring and assessing safety hazards or unsafe situations and developing measures for ensure appropriate safety procedures have been identified and followed.

Administrative Officer: Responsible for assisting the Team Leader and Assistant Team Leader and coordinating the on-scene administrative activities during a mission assignment.

Medical and Information Research: Identify needed research material that will ensure optimum access to the most current, complete, and accurate information available on NBC agents. Perform research needed to identify the agent(s) involved.

Field Medical Operations: Serve as a liaison between MMRS and local medical facilities receiving patients. Assist local jurisdictions with communicating vital information to each receiving hospital or the command hospital.

Law Enforcement: Directed by law enforcement officer. Advise team leader on law enforcement related issues and latest intelligence information.

Logistics: Responsible for maintaining the MMRS equipment cache.

Appendix B

Are Our Hospitals Prepared?

Accreditation: The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) is an independent not-for-profit organization, which sets standards, evaluates and accredits military and civilian health care facilities nationwide.⁴¹ JCAHO accreditation is considered a “recognized national symbol of quality,” indicating a healthcare organization has met certain performance standards affecting the quality of medical care delivered to patients. To date, nearly 18,000 healthcare organizations maintain accreditation as part of state licensing requirements.⁴² A major requirement for accreditation is each facility must maintain an emergency disaster preparedness plan outlining duties of all hospital staff members, points of contacts, supplies needed, and agency interaction.⁴³ Additionally, each facility is required to conduct two annual disaster drills and be subject to periodic inspections by JCAHO.⁴⁴ Although JCAHO has standards for hospitals responding to emergencies arising from disasters, and procedures to handle hazardous materials, there are no specific JCAHO standards addressing preparedness for WMD response.

Managed Care: In this era of “managed care,” the hospital industry is focused on the “bottom line” in light of competition, maintaining costs, and compliance with state and federal requirements for Medicaid and Medicare insurance reimbursements. The business aspect of the hospital industry can detract hospital officials from investing large amounts of operating funds to prepare their facilities to respond to a WMD event.

Continuing Medical Education: Opportunities for continuing medical education (CME) are limited. Presently, FEMA and the U. S. Army Chemical and Biological Defense Command are exporting some limited training opportunities to the civilian sector.

Appendix C⁴⁵
Federal Response Plan (FRP): Emergency Support Functions

The concept of the FRP is simple: When needed, the federal government provides local and state governments with the necessary personnel, technical expertise, equipment and other resources to ensure an effective response. Twenty-seven federal departments and agencies and the American Red Cross provide resources. Federal resources are grouped into **12 Emergency Support Functions (ESF)**. Each is headed by a primary agency.

***ESF 1: Transportation.**
Responsibility: Civilian & military transport support.
Primary Agency: Dept of Transportation

***ESF 2: Communications.**
Responsibility: Provide telecommunications support.
Primary Agency: National Communications System

***ESF 3: Public Works and Engineering**
Responsibility: Restore essential public services/facilities.
Primary Agency: U. S. Army Corps of Engineers

***ESF 4: Firefighting**
Responsibility: Detect and suppress wildland/rural fires.
Primary Agency: Dept of Agriculture

***ESF 5: Information and Planning**
Responsibility: Collect, analyze & disseminate info.
Primary Agency: FEMA

***ESF 6: Mass Care**
Responsibility: Manage & coordinate food and shelter for victims.
Primary Agency: American Red Cross

***ESF 7: Resource Support**
Responsibility: Equipment & material support.
Primary Agency: General Services Admin.

***ESF 8: Health & Medical Support**
Responsibility: Public health and medical care.
Primary Agency: U. S. Public Health Service.

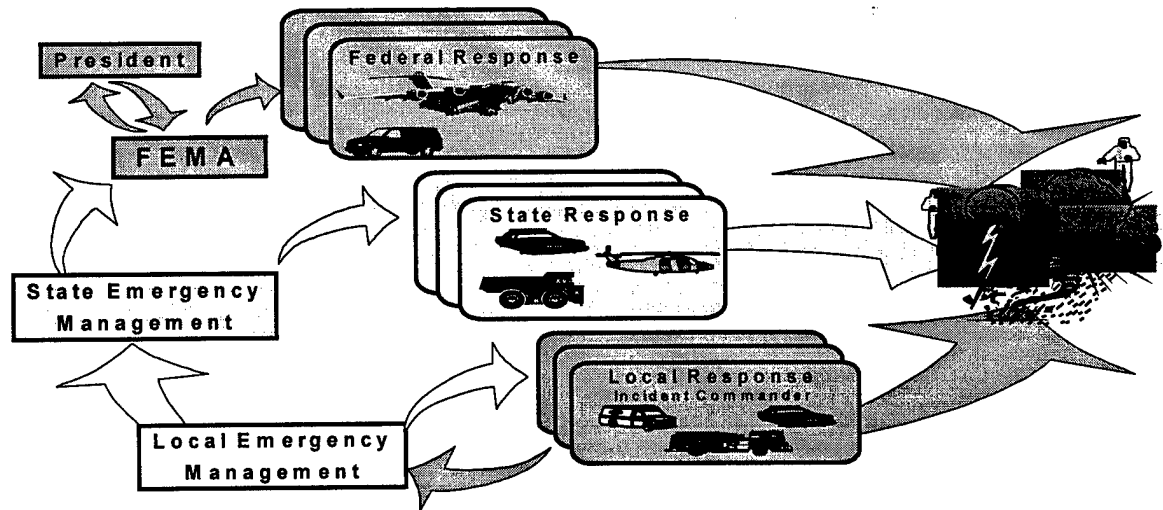
***ESF 9: Urban Search and Rescue**
Responsibility: Extricate victims in collapsed buildings
Primary Agency: FEMA

***ESF 10: Hazardous Materials**
Responsibility: Support response to oil/hazard materials.
Primary Agency: EPA

***ESF 11: Food**
Responsibility: Identify food needs and deliver needs.
Primary Agency: Department of Agriculture

***ESF 12: Energy**
Responsibility: Restore power systems and fuel supplies.
Primary Agency: Department of Energy

Tiered Disaster/Emergency Response



A major disaster requires a coordinated response involving all levels of government.

LOCAL:

Mayor or County Executive: Activates local Emergency Operations Center (EOC); communicates with Governor's office.

Incident Commander: A local emergency official who leads the response effort at the scene.

STATE:

Governor: Activates the State Emergency Operations Center (EOC); declares a State of Emergency; contacts FEMA Regional Director; requests Presidential declaration.

State Coordinating Officer: Leads State response; coordinates State activities with Federal response and recovery efforts.

REGIONAL:

FEMA Regional Director: Operates Regional Operations Center (ROC); organizes Emergency Response Team-Advance Element; reports to FEMA Director.

FEDERAL:

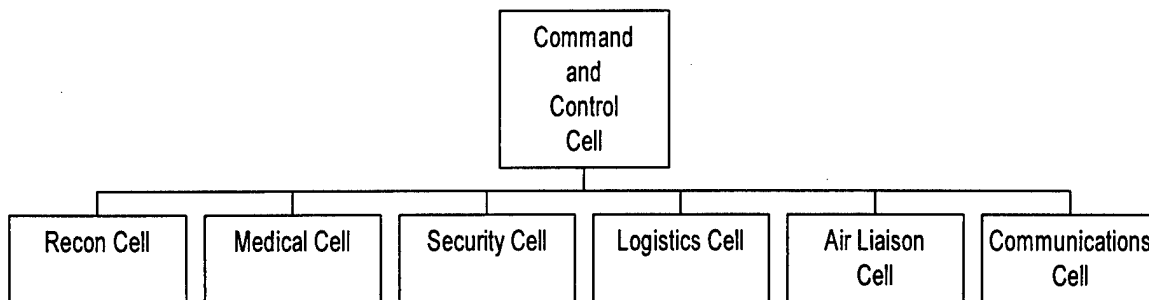
President of the United States: Declares an Emergency or Major Disaster; appoints the Federal Coordinating Officer (FCO).

FEMA Director: Recommends President declare and Emergency or Major Disaster.

Federal Coordinating Officer (FCO): Serves as the President's representative at disaster site; leads Federal response and recovery effort, which are supported by the Emergency Response Team (ERT).

Appendix E⁴⁸

National Guard Rapid Assessment Initial Detection (RAID) Element



Mission: Provide early assessment, initial detection, and technical advice to the incident commander during an incident involving weapons of mass destruction (WMD). Facilitate identification of DOD asset requirements.

Command and Control Cell: Provides overall command and control of the assessment team and conducts hazard modeling.

Recon Cell: Provide early detection, initial sample collection, and NBC.

Medical Support Cell: Provides an initial DOD medical assessment.

Security Cell: Provide initial assessment of security requirements and manages force protection/assessment element security.

Logistics Cell: Determines initial resource requirements and provides supply and maintenance support for the assessment element.

Air Liaison Cell: Coordinates for transportation and/or air movement of assessment element.

Communications Cell: Provides internal communication within the assessment element, coordinates for communications connectivity with civilian responders, and maintains a reach back capability for additional technical expertise.

Endnotes

¹ Richard Preston, The Cobra Event (New York: The Ballantine Group 1997), 23.

² U. S. Army Chemical Biological Defense Command, Biological Terrorism Tabletop Exercise Manual-Chicago (Aberdeen, MD: July 1998), 6. Outlined medical scenario for the tabletop exercise.

³ Benjamin G. M. Feril, "Military and Civilian Health Care Facilities to Response to Weapons of Mass Destruction (WMD) (Point Paper to Director for Military Support (DOMS), Army Operations Center, Washington, DC: 3 August 1998), 1. Between academic trimesters at the Naval War College, I was on Temporary Additional Duty (TAD) with the Director for Military Support (DOMS) from June to Aug 98. During this assignment, I served as an Action Officer in the Domestic Preparedness Branch and participated in the Chicago Tabletop Exercise as an Exercise Evaluator. The point paper I drafted was my final report to Brigadier General Bruce Lawlor, USA, Deputy Director for Military Support.

⁴ William E. Clark, United States Public Health Service/Office of Emergency Preparedness, Department of Health and Human Services, interview by author, 23 July 1998, OEP Headquarters, Rockville, MD. During my TAD assignment at DOMS, I met with Mr. Clark who briefed me on the Metropolitan Medical Strike Team (MMST) concept as USPHS/OEP capability for WMD Medical Response. Subsequent to this meeting, the MMST was redesigned as Medical Metropolitan Response System (MMRS).

⁵ Ibid.

⁶ Michael Anderson, United States Public Health Service/Office of Emergency Preparedness, telephone conversation with author, 29 January 1999. Provided updated status on the MMRS.

⁷ Ibid.

⁸ Jim Dwyer and others, Two Seconds Under the World (New York: Crown Publishing, Inc., 1994), 29.

⁹ Chris Seiple, "Consequence Management: Domestic Response to Weapons of Mass Destruction," Parameters, Autumn 1997, 119.

¹⁰ Benjamin G. M. Feril, "Military and Civilian Health Care Facilities to Response to Weapons of Mass Destruction (WMD) (Point paper to Deputy Director for Military Support (DOMS), Army Operations Center, Washington, DC: 3 August 1998), 1-2.

¹¹ Lisa Gordon-Hagerty, Director, Infrastructure Protection & Counter-Terrorism, National Security Council, The White House, interview by author 5 December 1998, Old Executive Office Building, The White House, Washington, DC. During this interview, Ms. Gordon-Hagerty explained the role of the NSC in coordinating the federal government's national WMD strategy. Additionally, Ms. Gordon-Hagerty briefed certain unclassified portions of Presidential Decision Directive 62.

¹² Federal Emergency Management Agency (FEMA), The Federal Response Plan (Washington, DC: 1992), 1-6.

¹³ Barbara Martinez, Assistant Director for National Disaster Preparedness Office, The Federal Bureau of Investigation (FBI), Department of Justice, interview by author 21 December 1998, The FBI Hoover Building, Washington, DC. Mr. Martinez briefed the role of the FBI in WMD Crisis Management.

¹⁴ Mike Austin, "Federal Emergency Management Agency," The Officer, May 1998, 32.

¹⁵ Federal Emergency Management Agency (FEMA), The Federal Response Plan (Washington, DC: 1992), 11-15.

¹⁶ Ibid., 29.

¹⁷ Ibid., 8-2.

¹⁸ "Disaster Response Programs." Department of Health and Human Services, United States Public Health Service/Office of Emergency Preparedness <<http://www.ndms.dhhs.gov>>(19 October 98), 1.

¹⁹ Ibid. 3

²⁰ U. S. Army Forces Command, Military Assistance to Civil Authorities: Command Readiness Program Handbook (Atlanta, GA, September 1998), 86.

²¹ "Disaster Response Programs." Department of Health and Human Services, United States Public Health Service/Office of Emergency Preparedness, <<http://www.ndms.dhhs.gov>>(19 October 98), 6.

²² Ibid., 4.

²³ Ibid., 3.

²⁴ William J. Clinton, "Remarks by the President at the United States Naval Academy Commencement", 22 May 98. President Clinton used the Naval Academy Commencement Ceremony to announce his policy towards WMD terrorism and the appointment of Mr. Richard Clarke to head the office of National Coordinator for Security, Infrastructure Protection and Counter-Terrorism, National Security Council, The White House.

²⁵ U. S. Army Forces Command, Military Assistance to Civil Authorities: Command Readiness Program Handbook (Atlanta, GA, September 1998), 15.

²⁶ Mike Austin, "Federal Emergency Management Agency," The Officer, May 1998, 33.

²⁷ U. S. Army Forces Command, Military Assistance to Civil Authorities: Command Readiness Program Handbook (Atlanta, GA, September 1998), 31-36.

²⁸ Ibid., 27.

²⁹ Colleen Wolfe, "Guarding the Homeland," National Guard, May 1998, 17.

³⁰ Deputy Secretary of Defense, Integrating National Guard and Reserve Component Support for Response to Attacks Using Weapons of Mass Destruction (Washington, DC, 26 January 1998), 21.

³¹ Ibid., 21.

³² U. S. Army Forces Command, Department of Defense Response Capabilities for a Weapon of Mass Destruction (Atlanta, GA: November 1998), 39-41.

³³ U. S. Army Forces Command, Military Assistance to Civil Authorities: Command Readiness Program Handbook (Atlanta, GA: September 1998), 31.

³⁴ Ibid., 29.

³⁵ National Interagency Fire Center, Incident Command System National Training Curriculum Module 1, ICS Orientation (Boise, Idaho: 1994), 1-5.

³⁶ National Interagency Fire Center, Incident Command System National Training Curriculum Module 3, Organizational Overview (Boise, Idaho: 1994), 3-1 to 3-29.

³⁷ National Interagency Fire Center, Incident Command System National Training Curriculum Module 1, ICS Orientation (Boise, Idaho: 1994), 1-7.

³⁸ Reserve Forces Policy Board, Department of Defense, Reserve Component Programs, Report of the Reserve Policy Board (Washington, DC: March 1998), 74.

³⁹ "Disaster Response Programs," Department of Health and Human Services/United States Public Health Services/Office of Emergency Preparedness <<http://www.ndms.dhhs.gov/>>(13 October 1998), 1

³⁹ "Disaster Response Programs," Department of Health and Human Services/United States Public Health Services/Office of Emergency Preparedness <<http://www.ndms.dhhs.gov/>>(13 October 1998), 1

⁴⁰ U. S. Department of Health and Human Services, Office of the Secretary, Office of Public Health and Science/Office of Emergency Preparedness, Metropolitan Medical Strike Team (MMST) Field Operations Guide, (Rockville, MD: 1997), 27,33,35,39,43,48,111,133,151.

⁴¹ "Facts About the Joint Commission on Accreditation of Healthcare Organizations," Joint Commission on Accreditation of Healthcare Organizations, <http://www.jcaho.org/about_jc/jcinfo.htm>(30 July 1998), 1.

⁴² Ibid., 1.

⁴³ Joint Commission on the Accreditation of Healthcare Organization, Comprehensive Accreditation Manual for Hospitals: The Official Handbook (Chicago, IL: 1 February 1998), EC-12.

⁴⁴ Ibid., EC-12.

⁴⁵ Federal Emergency Management Agency (FEMA), Executive Overview: The Federal Response Plan, (Washington, DC: April 1995)

⁴⁶ Ibid.

⁴⁷ Director of Military Support, Command Brief for the Army War College, 4 September 1998.

⁴⁸ Deputy Secretary of Defense, Integrating National Guard and Reserve Component Support for Response to Attacks Using Weapons of Mass Destruction, (Washington, DC: 26 January 1998), 21-22.

Bibliography

- Anderson, Michael, United States Public Health Service/Office of Emergency Preparedness. Telephone interview with author, 29 January 1999.
- Austin, Mike, "Federal Emergency Management Agency." The Officer, May 1998, 32.
- Armed Forces Staff College, The Joint Staff Officers' Guide 1997, AFSC Pub 1, Norfolk, VA, 1997.
- Campbell, James K., Weapons of Mass Destruction Terrorism. Seminole, FL: Interpack Press, 1994.
- Clark, William E., United States Public Health Service/Office of Emergency Preparedness. Interview by author, 23 July 1998. OEP Headquarters, Rockville, MD.
- Clinton, William J. "Remarks by the President at the United States Naval Academy Commencement, 22 May 1998.
- Cohen, William, Annual Report to the President and Congress, Office of the Secretary of Defense, Washington, DC, 1998.
- Danzig, Richard and Pamela Berkowki. "Why Should We Be Concerned About Biological Warfare." Journal of the American Medical Association, Vol. 278, Number 5, 6 August 1997, 431-432.
- Department of the Army/Headquarters, U.S. Marine Corps. Domestic Support Operations FM 100-19/FMFM 7-10, Ft Monroe, VA TRADOC/ Quantico, VA, MCCDC, July 1993.
- Department of Defense, Defense Reform Initiative. The Business Strategy for Defense in The 21st Century, Washington, DC, November 1997.
- Deputy Undersecretary of Defense, Integrating National Guard and Reserve Component Support for Response to Attacks Using Weapons of Mass Destruction. Washington, DC, 26 January 1998.
- "Disaster Response Programs," Department of Health and Human Services, United States Public Health Service/Office of Emergency Preparedness<<http://ndms.dhhs.gov>> (19 October 1998).
- Director for Military Support (DOMS). Command Brief for Army War College, 4 September 1998.

Dwyer, Jim, David Kocieniewski, Deidre Murphy, and Peg Tyre. Two Seconds Under the World. New York: Crown Publishing, Inc., 1994.

Federal Emergency Management Agency. The Federal Response Plan, Washington, DC, 1992.

Federal Emergency Management Agency, Executive Overview. The Federal Response Plan, Washington, DC.

"Federal Terrorism Response Enters 'Second Phase.'" International Association of Emergency Management Bulletin, December 1998, 12-13.

Feril, Benjamin G. M., "Military and Civilian Health Care Facilities to Respond to Weapons of Mass Destruction," Point Paper to Deputy Director of Military Support, Army Operations Center, Washington, DC: 3 August 1998.

Fisher, Brent A. "The Emergency Department and Managed Care: A Synergistic Model." Journal of Healthcare Management, Vol 43, Number 4, July/August 1998.

Franz, David R. and Peter Jahrling. "Clinical Recognition and Management of Patients Exposed to Biological Warfare Agents." Journal of the American Medical Association, Vol 278, Number 5, 6 August 1997, 399-411.

Ferguson, James R. "Biological Weapons and U. S. Law." Journal of the American Medical Association, Vol. 278, Number 5, 6 August 1997, 357-360.

Gordon-Hagerty, Lisa, Director, Infrastructure Protection & Counter-Terrorism, National Security Council, The White House. Interview by the author, 5 December 1998. Old Executive Office Building, The White House, Washington, DC.

"HHS Response Systems." Office of Emergency Preparedness, United States Public Health Service, Department of Health and Human Services. Washington, DC: 1998.

Jackson, Richard A., Nuclear, Biological, and Chemical Defense in the 21st Century. (Carlisle Barracks, PA: Center for Strategic Leadership, U. S. Army War College, 1995)

Joint Commission on the Accreditation of Healthcare Organization, "Facts About The Joint Commission on Accreditation of Healthcare Organizations."
http://www.jcaho.org/about_jc/jcinfo.htm (30 July 1998)

Joint Commission on the Accreditation of Healthcare Organization. Comprehensive Accreditation Manual for Hospitals: The Official Handbook. Chicago: JCAHO, 1998.

Lujan, Thomas R., "Legal Aspects of Domestic Employment of the Army." Parameters, Autumn 1997, 83-97.

Martinez, Barbara. Assistant Director for the National Disaster Preparedness Office, The Federal Bureau of Investigation, Department of Justice. Interview by the author, 21 December 1998, The FBI Hoover Building, Washington, DC.

Mercier, Charles L., "Terrorist, WMD, and the US Army Reserve." Parameters, Autumn 1997, 98-117.

Miller, Judith and William J. Broad. "Clinton Describes Terrorism Threat for 21st Century." The New York Times, 22 January 1999, <<http://www.nytimes.com/library/world/global/012299germ-warfare.html>>

Miskel, James F. "Observations on the Role of the Military in Disaster Relief." Naval War College Review, Winter 1996, 105-113.

Morash, Robert. morash@gibraltar.net "CBIRF Medical." 10 January 99. E-mail. Bferil@aol.com (10 January 1999).

National Interagency Fire Center. Incident Command System National Training Curriculum, Module 1 ICS Orientation. Boise, Idaho: October 1994. 1-5.

National Interagency Fire Center. Incident Command System National Training Curriculum, Module 3 ICS Organizational Overview. Boise, Idaho: October 1994. 1-7

Osterman, Joseph. "Who Will Answer the Chem/BioCall?" United States Naval Institute Proceedings, December 1996, 37-40.

Preston, Richard. The Cobra Event. New York: The Ballantine Group, 1997.

Roberts, Brad. Terrorism With Chemical and Biological Weapons. Alexandria, VA: The Chemical and Biological Arms Control Institute, 1997. 113-120.

Reserve Policy Board, Department of Defense, Reserve Component Programs, Report of the Reserve Policy Board. Washington, DC: March 1998, 74.

Sadayoshi Ohbu and others. "Sarin Gas Poisoning on Tokyo Subway." <http://www.sma.org/smj/97jun3.htm>, 8 July 1998.

Seiple, Chris. "Consequence Management: Domestic Response to Weapons of Mass Destruction." Parameters, Autumn 1997, 119.

-
- Simon, Jeffery D. "Biological Terrorism: Preparing to Meet the Threat," Journal of the American Medical Association, Vol. 278, Number 5, 6 August 1997, 428-430.
- Tucker, Jonathan B. "National Health and Medical Services Response to Incident of Chemical and Biological Terrorism," Journal of the American Medical Association, Vol. 278, Number 5, 6 August 1997, 362-367.
- U. S. Army Chemical Biological Defense Command. Biological Terrorism Tabletop Exercise Manual-Chicago. Aberdeen, MD: 1998)
- U. S. Army Forces Command. Military Assistance to Civil Authorities: Command Readiness Program Handbook. Atlanta, GA: September 1998.
- U. S. Army Forces Command. Department of Defense Response Capabilities for a Weapon of Mass Destruction. Atlanta, GA: November 1998.
- U. S. Public Health Service/Office of Emergency Preparedness. Proceedings of the The Seminar on Responding to the Consequences of Chemical and Biological Terrorism. Bethesda, MD: Uniformed Services University of Health Sciences, 11-14 July 1995.
- U. S. Public Health Service/Office of Emergency Preparedness. Field Operations Guide For Metropolitan Medical Strike Team. Rockville, MD, 1997.
- "White House Issues Directives on Terrorism." International Association of Emergency Manager Bulletin, August 1998, 11.
- Wolfe, Colleen. "Guarding the Homeland." National Guard, May 1997.